

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A casting apparatus comprising:
a die which has an opening section above the die so as to pour a molten metal therefrom;
a plate-shaped heater ~~which is~~ disposed above the die horizontally;
a gas supplying section which supplies an inert gas to a surface of the molten metal;
a lid which is disposed horizontally between the surface of the molten ~~liquid~~ metal
~~and an entirety of the heater during operation of the heater~~; and
a lid moving structure which moves the lid relatively to the die and controls an opening amount of the opening section above the die.
2. (Original) A casting apparatus according to claim 1 wherein the lid moving structure adjusts the opening amount according to a flow amount of the inert gas.
3. (Original) A casting apparatus according to claim 1 wherein the lid moving structure has a structure for moving the lid relatively to the die vertically, horizontally, or rotatively.
4. (Original) A casting apparatus according to claim 1 wherein:
the molten metal is a molten silicon; and
at least a bottom surface of the lid is coated by a non-reactive material with a silicon oxide gas or a silicide.
5. (Canceled)
6. (New) A casting apparatus according to claim 1 wherein the plate-shaped heater is

support in parallel with the lid.

7. (New) A casting apparatus according to claim 1 wherein:

the lid comprises a first plate having a first hole, and an adjacent second plate having a second hole, and

the first plate is configured to rotate relative to the second plate such that the first hole coincides with the second hole.

8. (New) A casting apparatus according to claim 1 further comprising an additional heater disposed below the die.

9. (New) A casting apparatus comprising:

a die having an opening section;

a heater disposed above said die;

a gas supplying section configured to supply an inert gas to a surface of molten metal provided within said die;

a lid configured to be disposed between the surface of the molten liquid and said heater; and

means for adjusting an opening amount of said opening section according to a flow amount of the inert gas to the surface of the molten metal.

10. (New) The casting apparatus according to claim 9, wherein said means for adjusting adjusts said opening amount of said opening section wherein a flow speed of the inert gas flowing out of the opening section between said lid and said die is constant.

11. (New) The casting apparatus according to claim 10, wherein said means for adjusting increases said opening amount of said opening section when the flow speed of the

inert gas flowing out of the opening section between said lid and said die increases, and decreases said opening amount of said opening section when the flow speed of the inert gas flowing out of the opening section between said lid and said die decreases.

12. (New) The casting apparatus according to claim 9, wherein said means for adjusting adjusts said opening amount of said opening section by moving said lid relative to said die.

13. (New) The casting apparatus according to claim 12, wherein said means for adjusting adjusts said opening amount of said opening section by vertically moving said lid relative to said die.

14. (New) The casting apparatus according to claim 12, wherein said means for adjusting adjusts said opening amount of said opening section by horizontally moving said lid relative to said die.

15. (New) The casting apparatus according to claim 12, wherein said means for adjusting adjusts said opening amount of said opening section by rotating said lid relative to said die.

16. (New) The casting apparatus according to claim 12, wherein:
said lid comprises a first plate having a first hole, and an adjacent second plate having a second hole, and

said means for adjusting adjusts said opening amount of said opening section by rotating said first plate relative to said second plate such that said first hole coincides with said second hole.

17. (New) The casting apparatus according to claim 9, further comprising an

Application Serial No.: 10/625,657
Reply to Office Action dated March 11, 2005

additional heater disposed below said die.

18. (New) The casting apparatus according to claim 1, further comprising an additional heater disposed below said die.